

CLAIM AMENDMENTS

1. (canceled)

1 2. (previously presented) The electric motor according
2 to claim 26, wherein the windings comprise a first set of coil
3 windings disposed in the first stator part and a second set of coil
4 windings disposed in the second stator part.

5 3. (previously presented) The electric motor according
6 to claim 26, wherein there are provided more than two stator parts
7 located in the chamber and a corresponding number of magnetic
8 elements in the rotor.

1 4. (currently amended) The electric motor according to
2 claim [[26,]] 25 wherein the inner tube is secured in the outer
3 tube by swaging.

1 5. (previously presented) The electric motor according
2 to claim 26, wherein the rotor includes a rotatable shaft
3 comprising separately formed shaft elements secured together in
4 series.

5 6. (previously presented) The electric motor according
6 to claim 5, wherein the rotor has a first shaft element disposed
7 within the first stator part and a second shaft element disposed
8 within the second stator part.

1 7. (currently amended) The electric motor according to
2 claim [[26,]] 25 wherein the outer tube comprises separately formed
3 outer tube elements secured together in series.

1 8. (currently amended) The electric motor according to
2 claim [[26,]] 25 wherein the outer tube is at least partially
3 secured to the inner tube by inward radial deformation.

1 9. (currently amended) The electric motor according to
2 claim [[26]] 25 wherein the inner tube is made from a
3 nonmagnetizable material.

1 10. (previously presented) An electric motor for
2 powering downhole tools, the motor comprising:
3 a first stator;
4 a second stator;
5 conductive windings;
6 a shaft centered on and extending along an axis and
7 including a first magnetic element and a second magnetic element;
8 coaxial inner and outer tubes defining a sealed annular
9 chamber holding the first and second stators, the first magnetic

10 element being aligned with the first stator and the second magnetic
11 element being aligned with the second stator such that when the
12 windings are energized the stators act on the magnetic elements;
13 and

14 a pressure compensation means in the chamber.

1 11. (previously presented) The electric motor according
2 to claim 10, wherein the pressure compensation means is axially
3 slidable annular seals.

1 12. (currently amended) The electric motor according to
2 claim [[26]] 25, further comprising a connection of the windings to
3 a power supply enclosed in the sealed chamber.

1 13. (currently amended) The electric motor according to
2 claim [[26]] 25 wherein the rotor is connected to [[a]] pump means
3 for forcing well fluids through the flowpath.

14 - 20. (canceled)

1 21. (previously presented) An electric motor suitable
2 for installing in a borehole for powering downhole tools, the motor
3 comprising

4 a stator including a first set of coil windings;
5 a rotatable shaft including a magnetic element;

6 an outer hollow tube and an inner tube concentrically
7 inside the outer tube together defining an annular chamber, the
8 inner tube defining a flowpath, the stator being located in the
9 annular chamber, the rotatable shaft and the magnetic element being
10 at least partially tubular; and

11 a pressure compensation means in the chamber.

1 22. (previously presented) The electric motor according
2 to claim 21, wherein the pressure compensation means is axially
3 slidable annular seals.

1 23. (previously presented) The electric motor according
2 to claim 25, further comprising a connection of the windings to a
3 DC supply in the sealed chamber.

24. (canceled)

1 25. (currently amended) An electric motor for
2 installation in a bore to power a downhole tool, the motor
3 comprising:

4 an inner tube centered on an axis and forming on the axis
5 a flowpath for passage of well fluids;

6 an outer tube coaxially spacedly surrounding the inner
7 tube and ~~axially and rotationally~~ fixed to the inner tube; and

8 seals between the inner and outer tube forming therewith
9 a chamber separate from the flowpath;

10 a stator having windings and laminations in the chamber;
11 and

12 a rotor connected to the tool, rotatable about the axis,
13 and having in the inner tube a magnetic element coacting with the
14 stator.

1 26. (previously presented) The electric motor defined
2 in claim 25 wherein the stator has first and second axially similar
3 parts, and the rotor has respective first and second parts
4 similarly axially spaced and juxtaposed with the respective stator
5 parts.